FIG. 1A

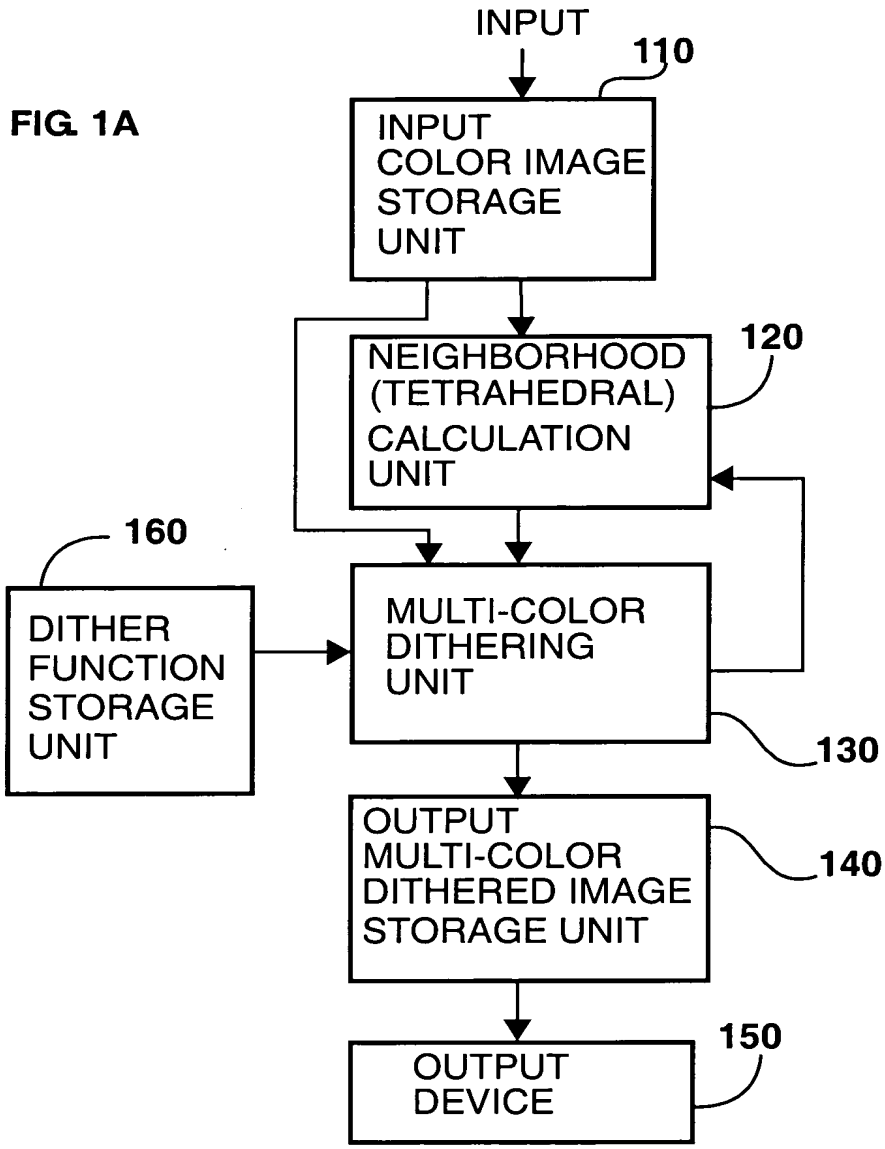
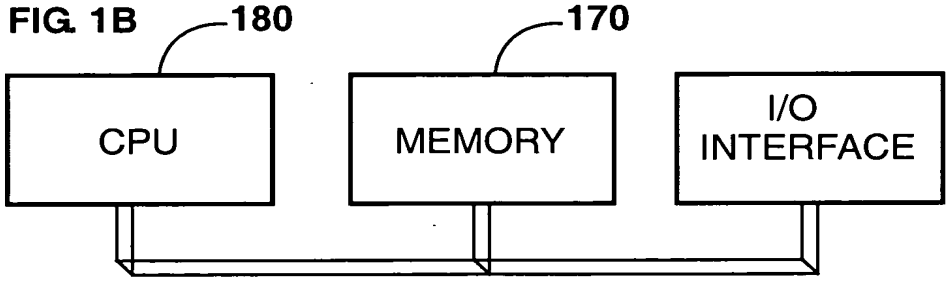

INPUT
110
INPUT COLOR IMAGE STORAGE UNIT
120
NEIGHBORHOOD (TETRAHEDRAL) CALCULATION UNIT
160
DITHER FUNCTION STORAGE UNIT
MULTI-COLOR DITHERING UNIT
130
OUTPUT MULTI-COLOR DITHERED IMAGE STORAGE UNIT
140
OUTPUT DEVICE
150

FIG. 1B


180
170
CPU
MEMORY
I/O INTERFACE

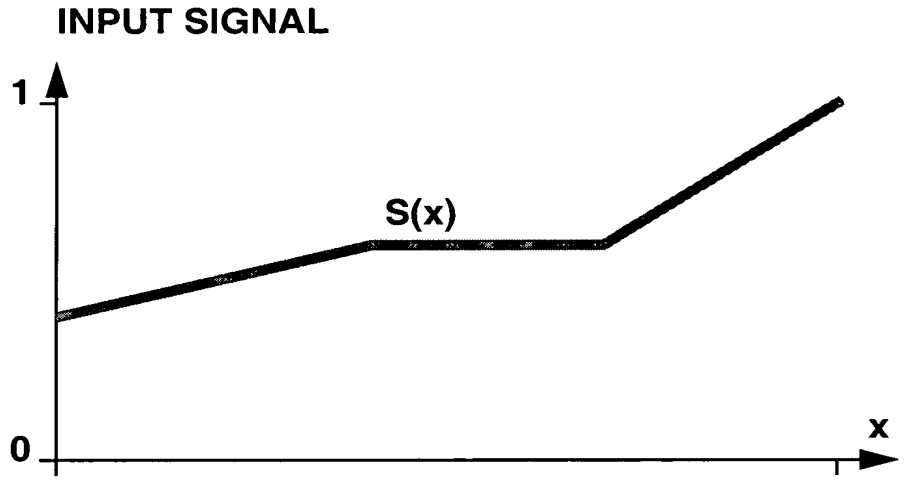


FIG. 2A
(PRIOR ART)

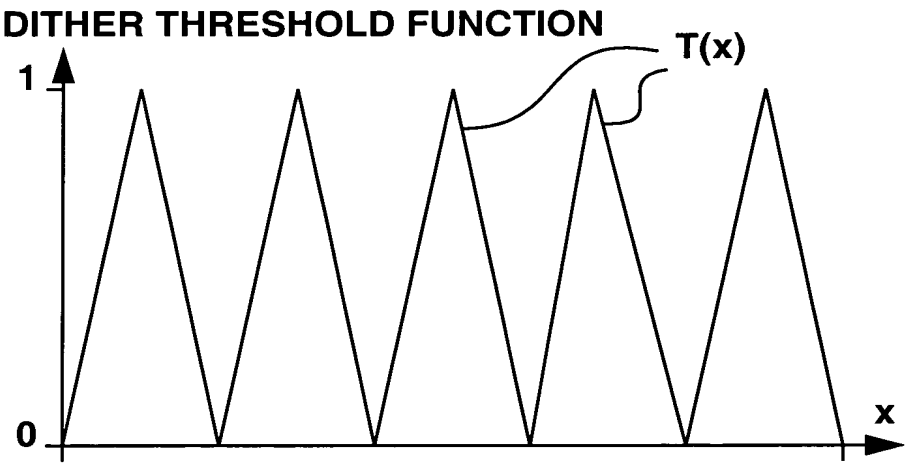


FIG. 2B
(PRIOR ART)

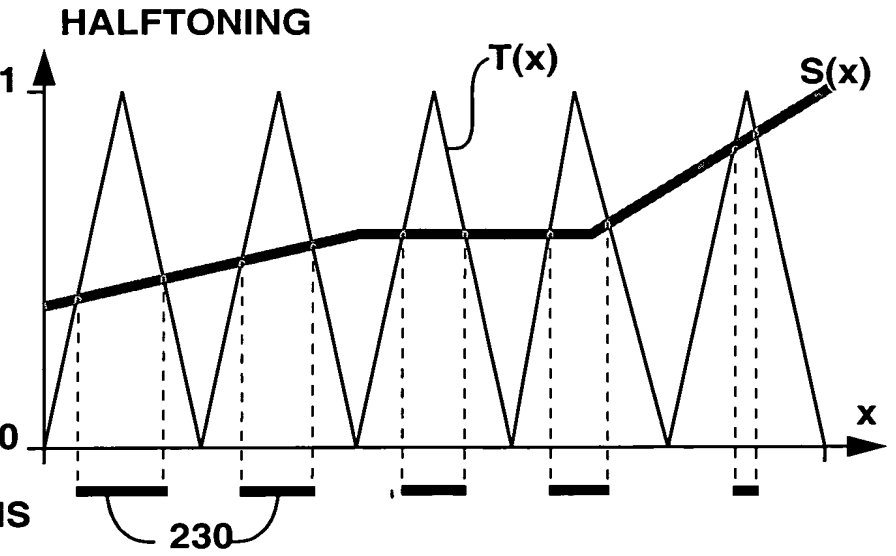


FIG. 2C
(PRIOR ART)

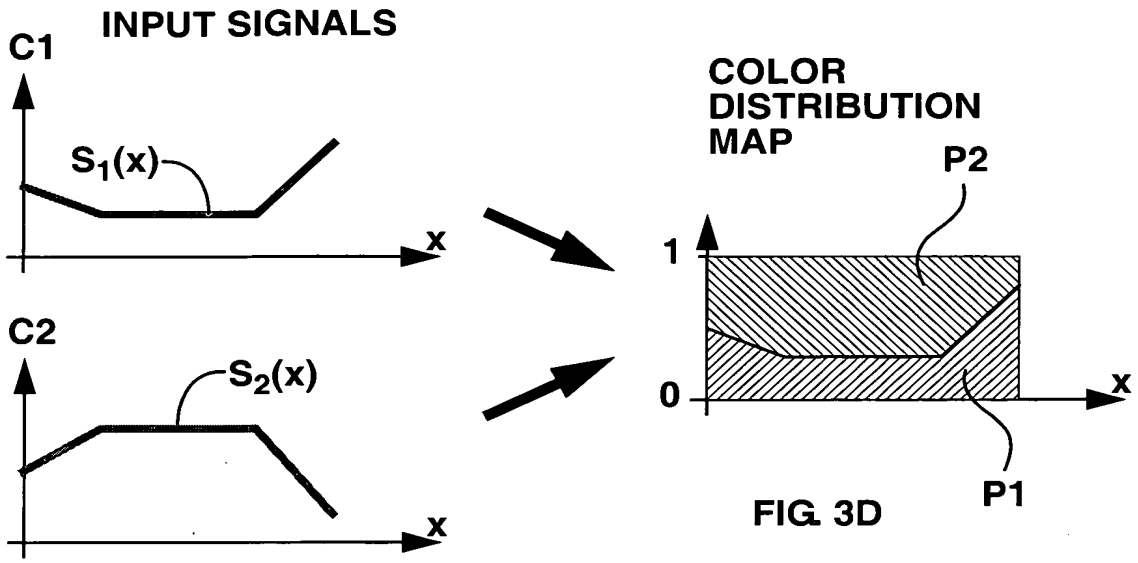


FIG. 3A

FIG. 3D

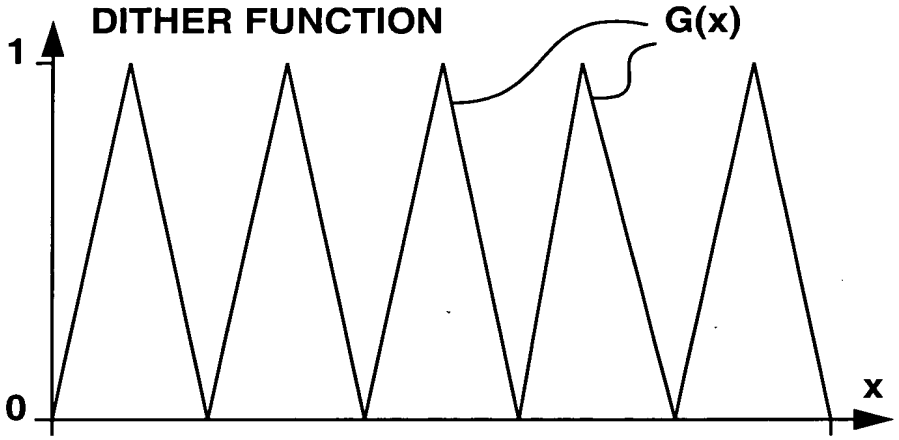


FIG. 3B

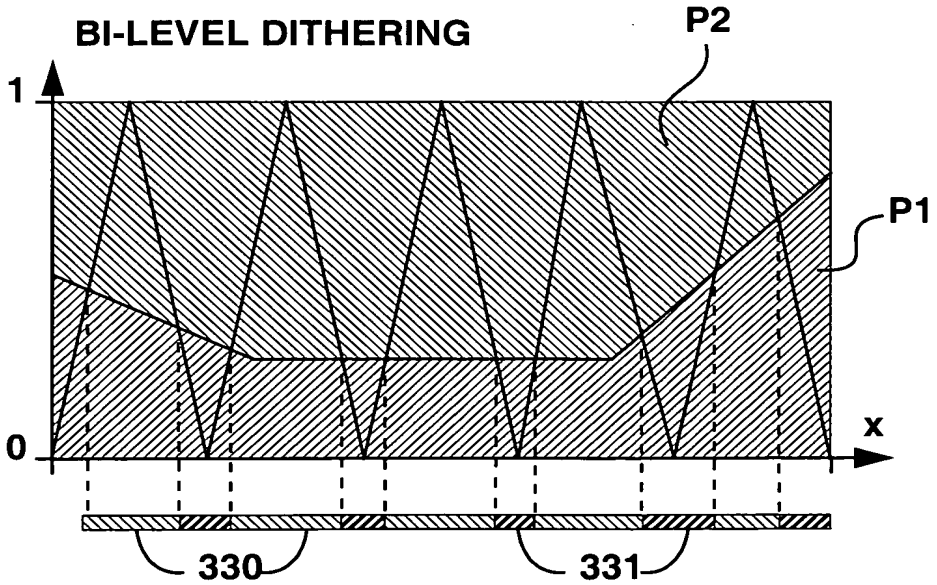


FIG. 3C

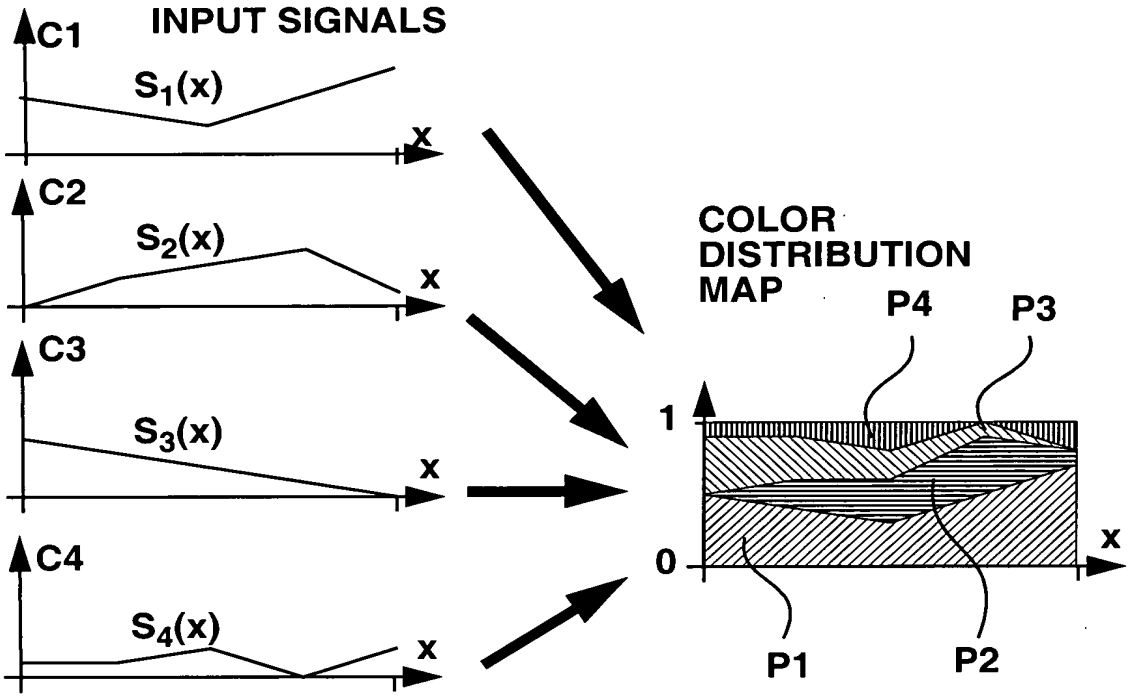


FIG. 4A

FIG. 4B

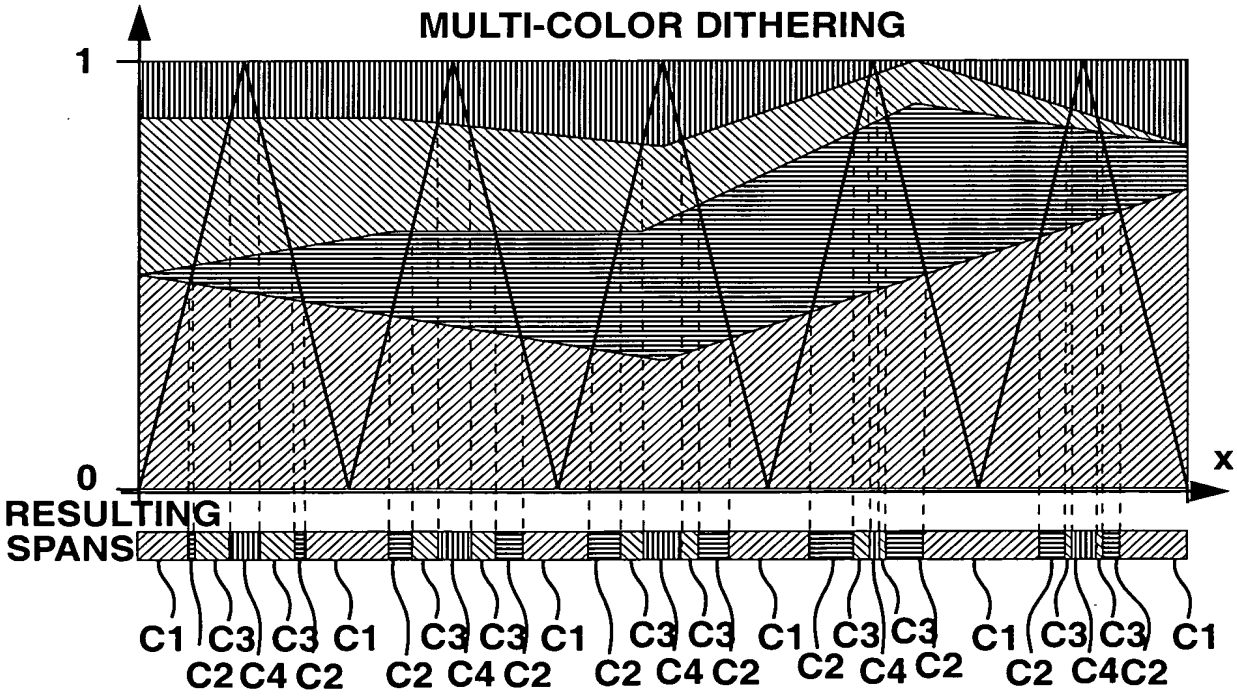
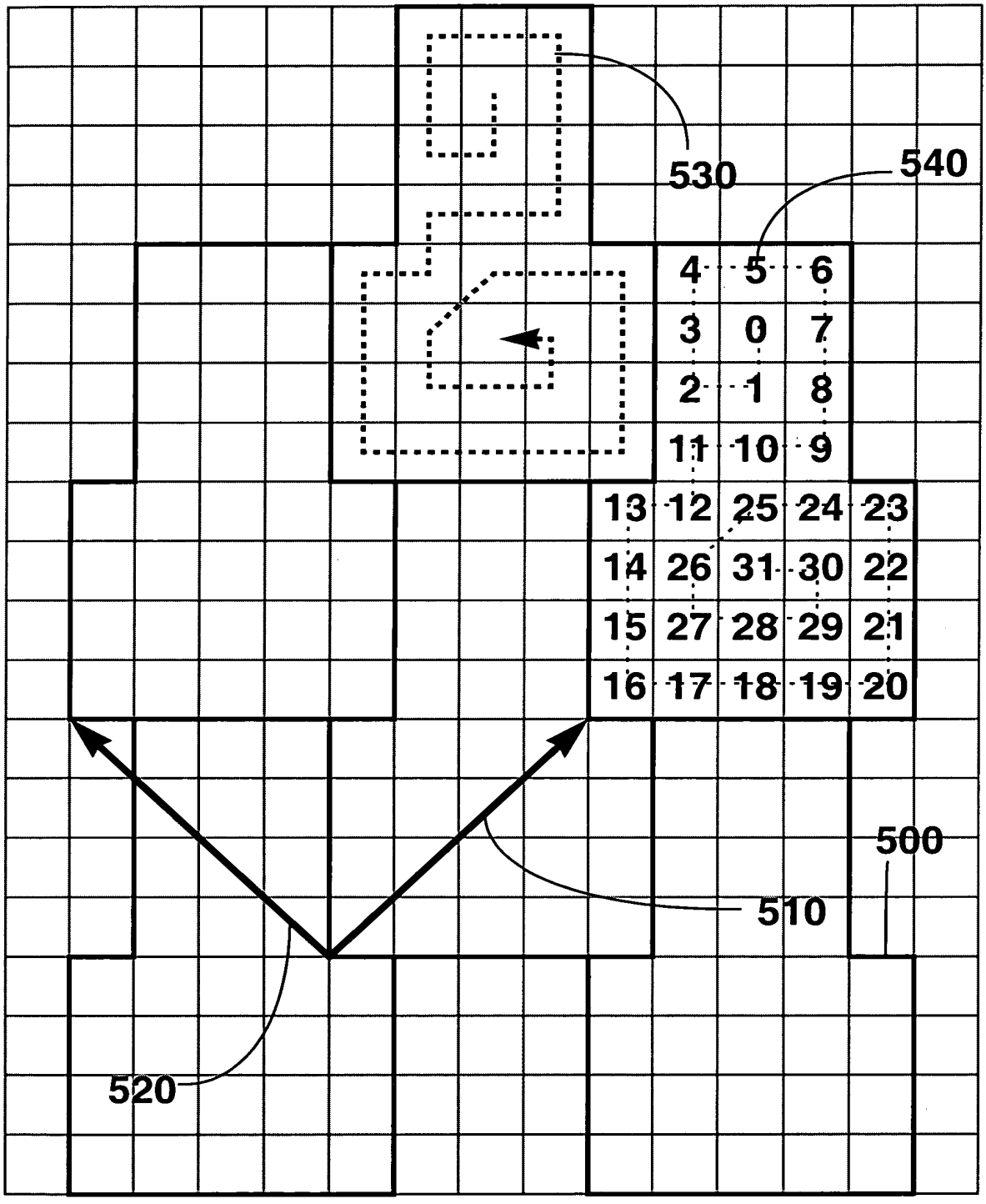


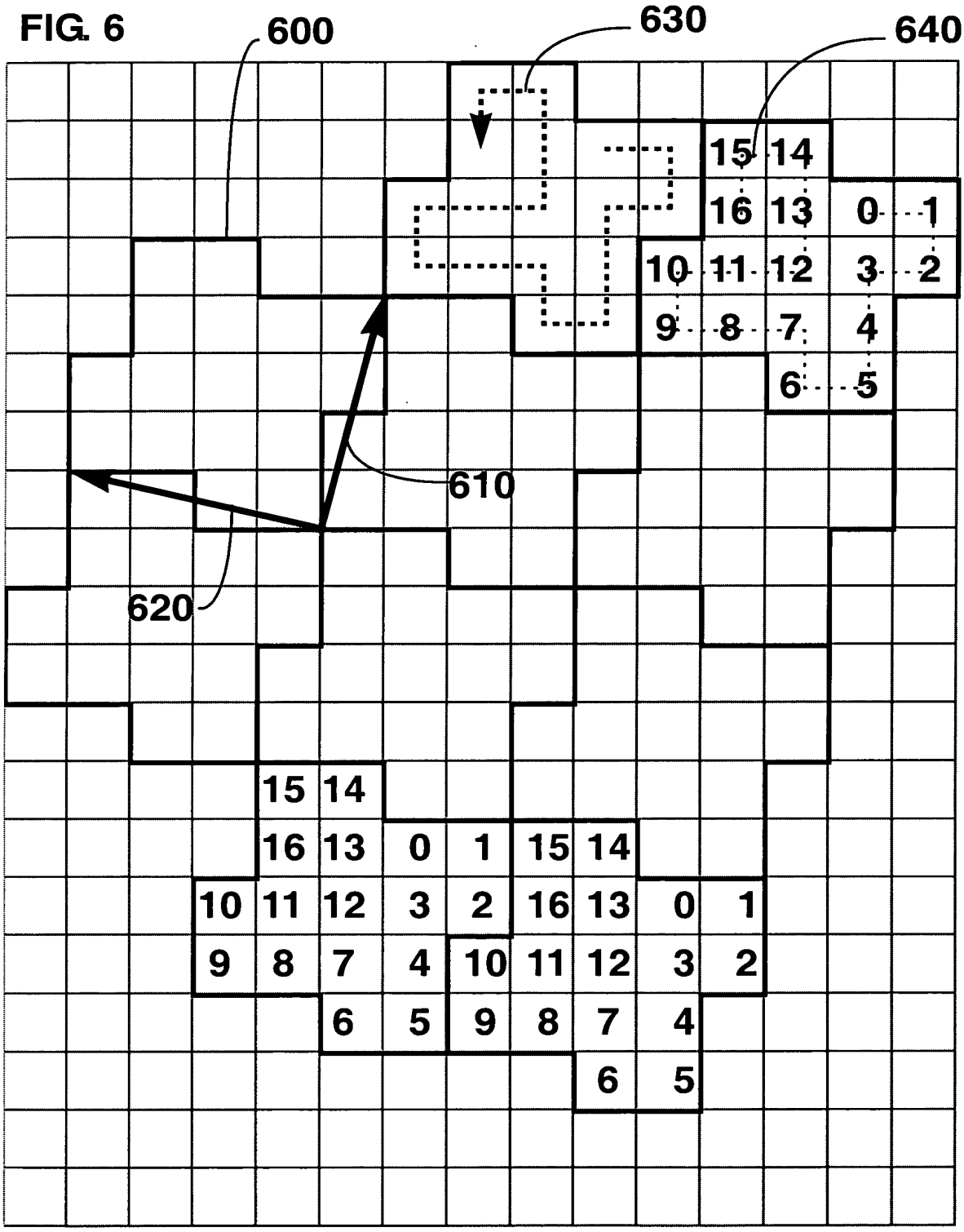
FIG. 4C

FIG. 5 (PRIOR ART)



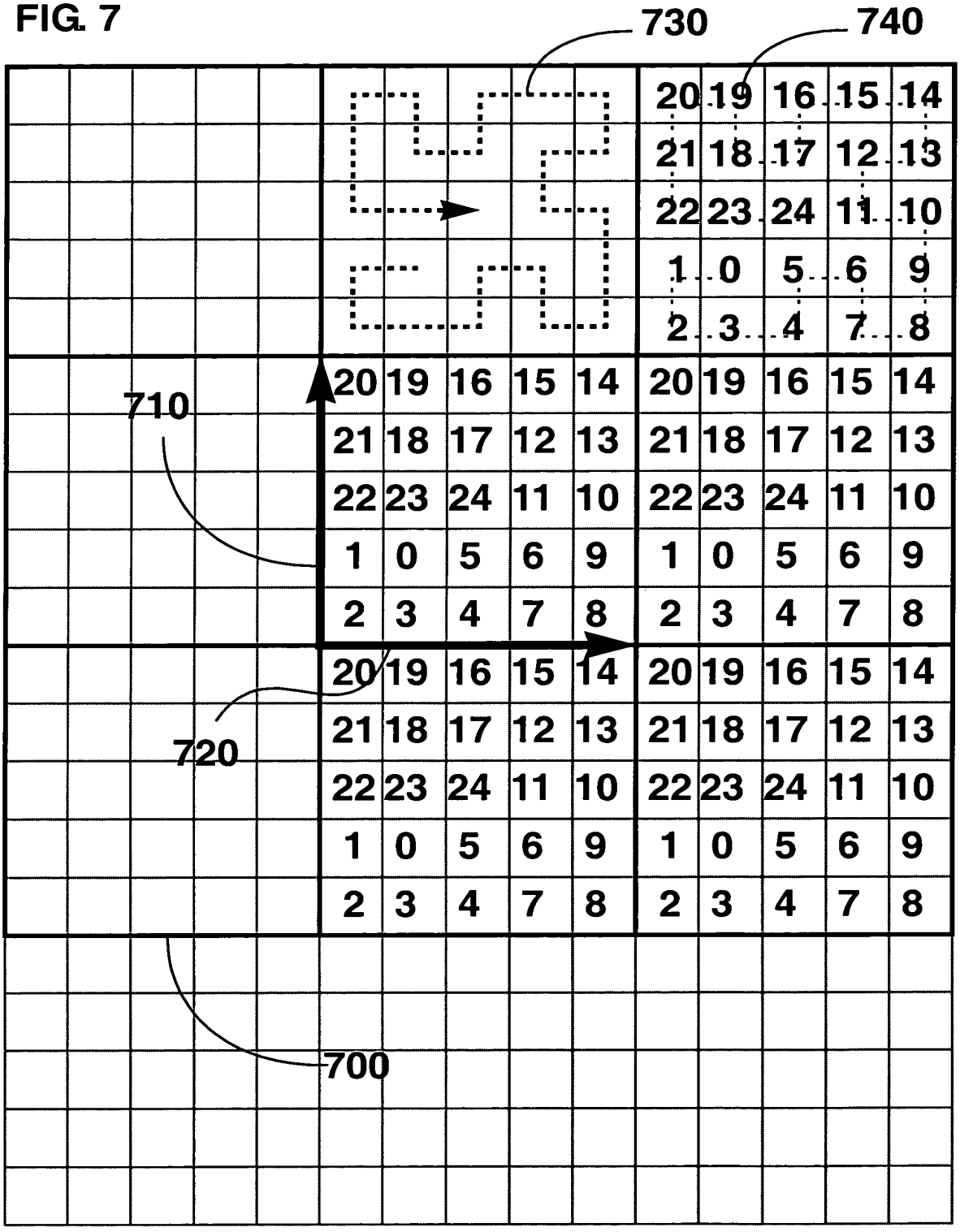
Basic Tile Area = 32
Normalization Coefficient = 1/32

FIG. 6



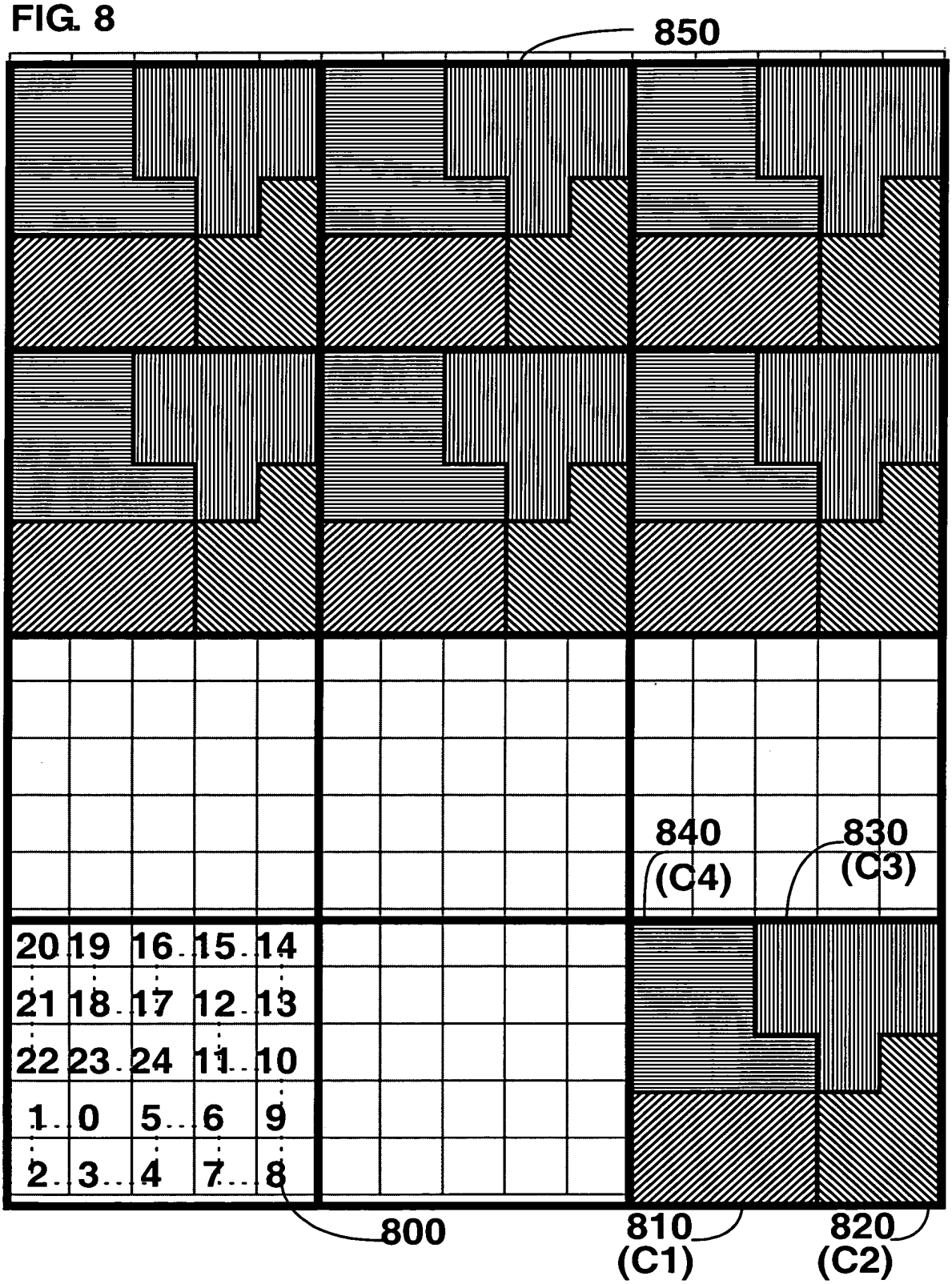
Basic Tile Area = 17
Normalization Coefficient = 1/17

FIG. 7



Basic Tile Area = 25
Normalization Coefficient = 1/25

FIG. 8



Basic Tile Area = 25
Normalization Coefficient = 1/25

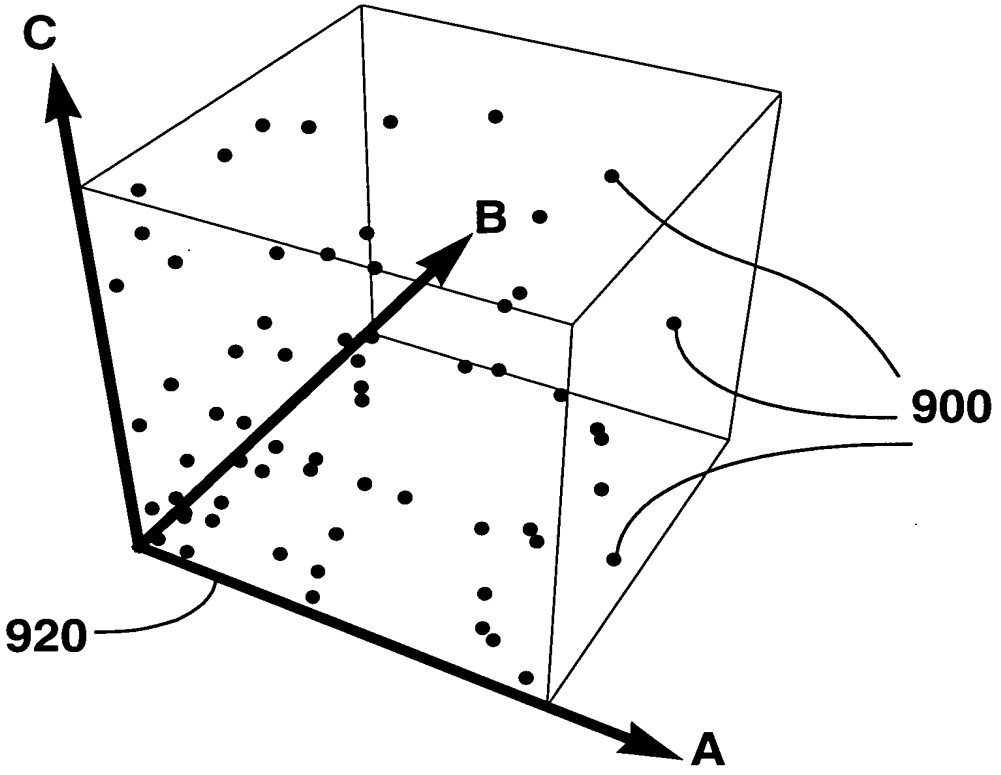


FIG. 9A

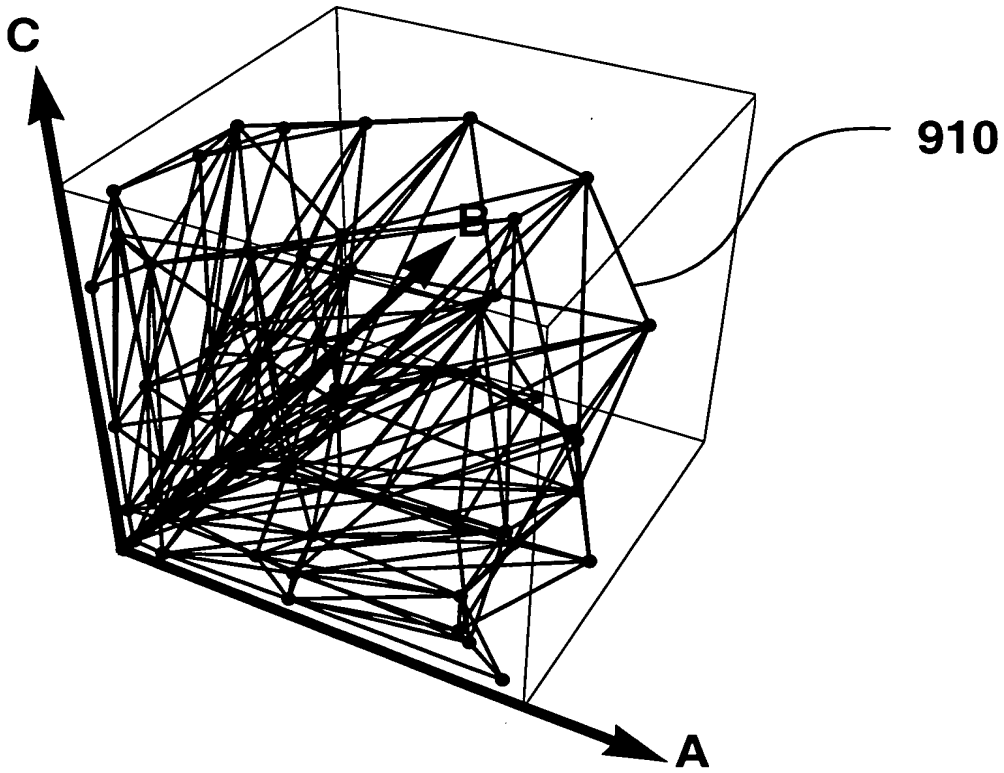


FIG. 9B

FIG. 10

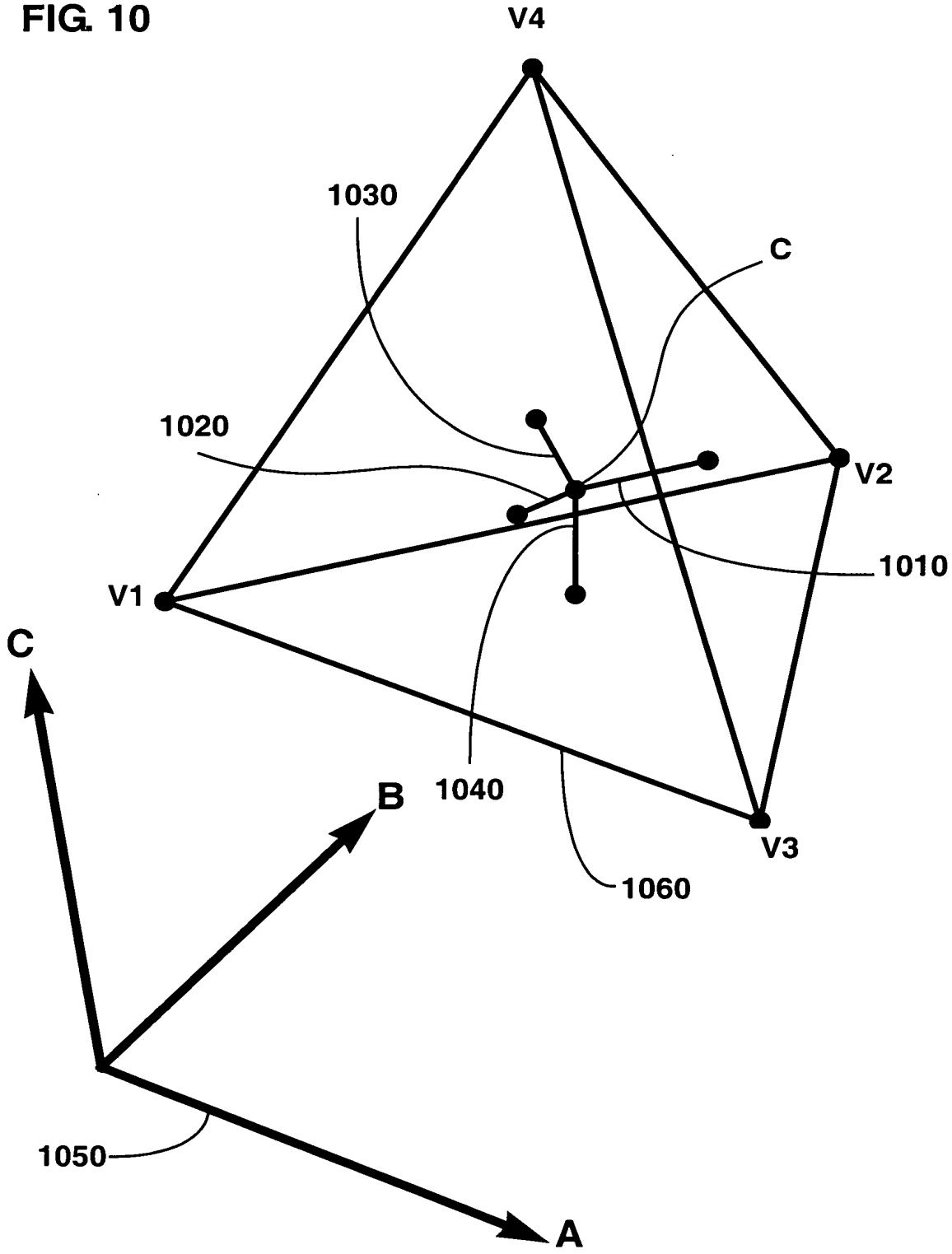


FIG. 11

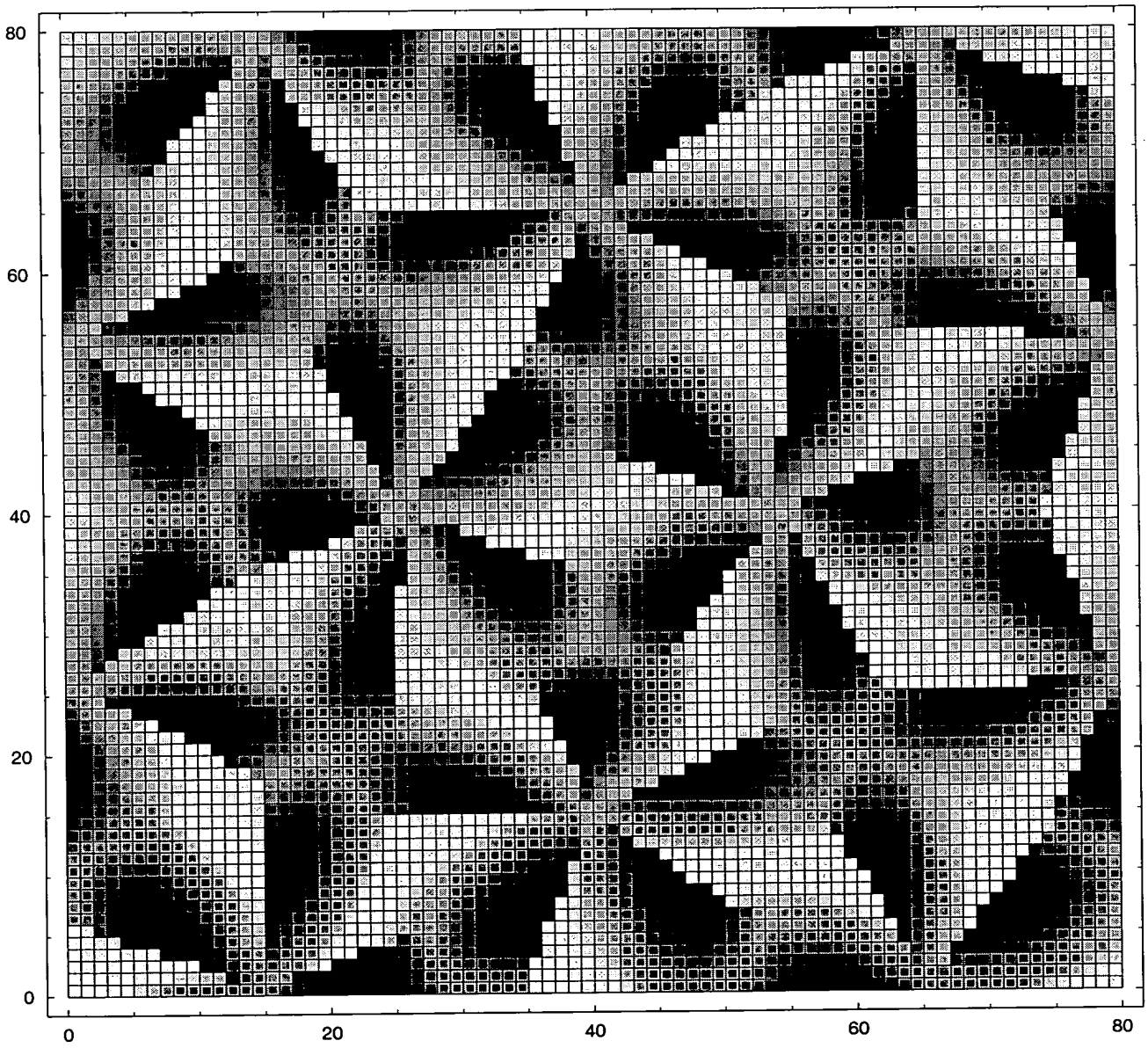


FIG. 12

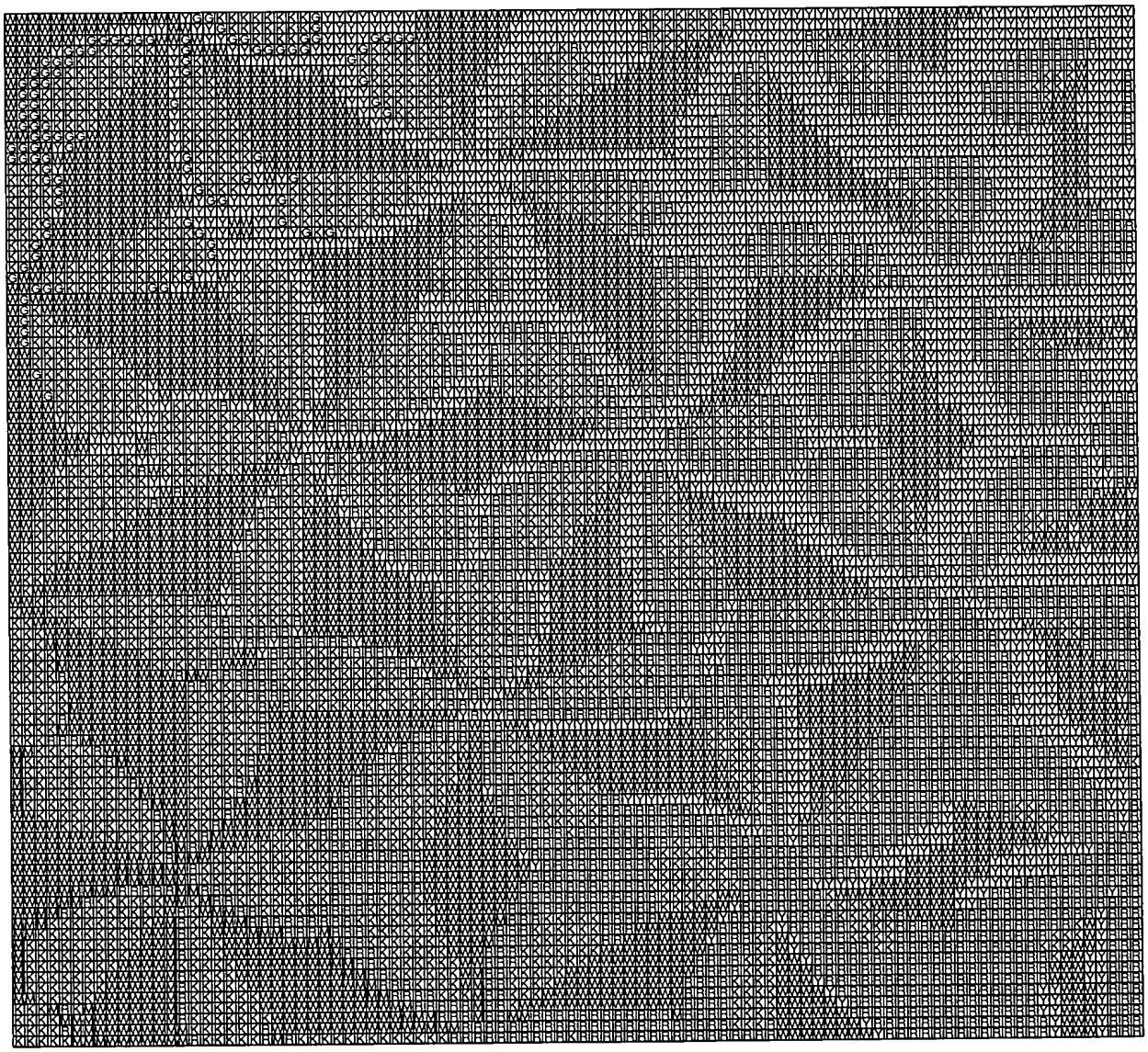


FIG. 13 MAGENTA LAYER (M)

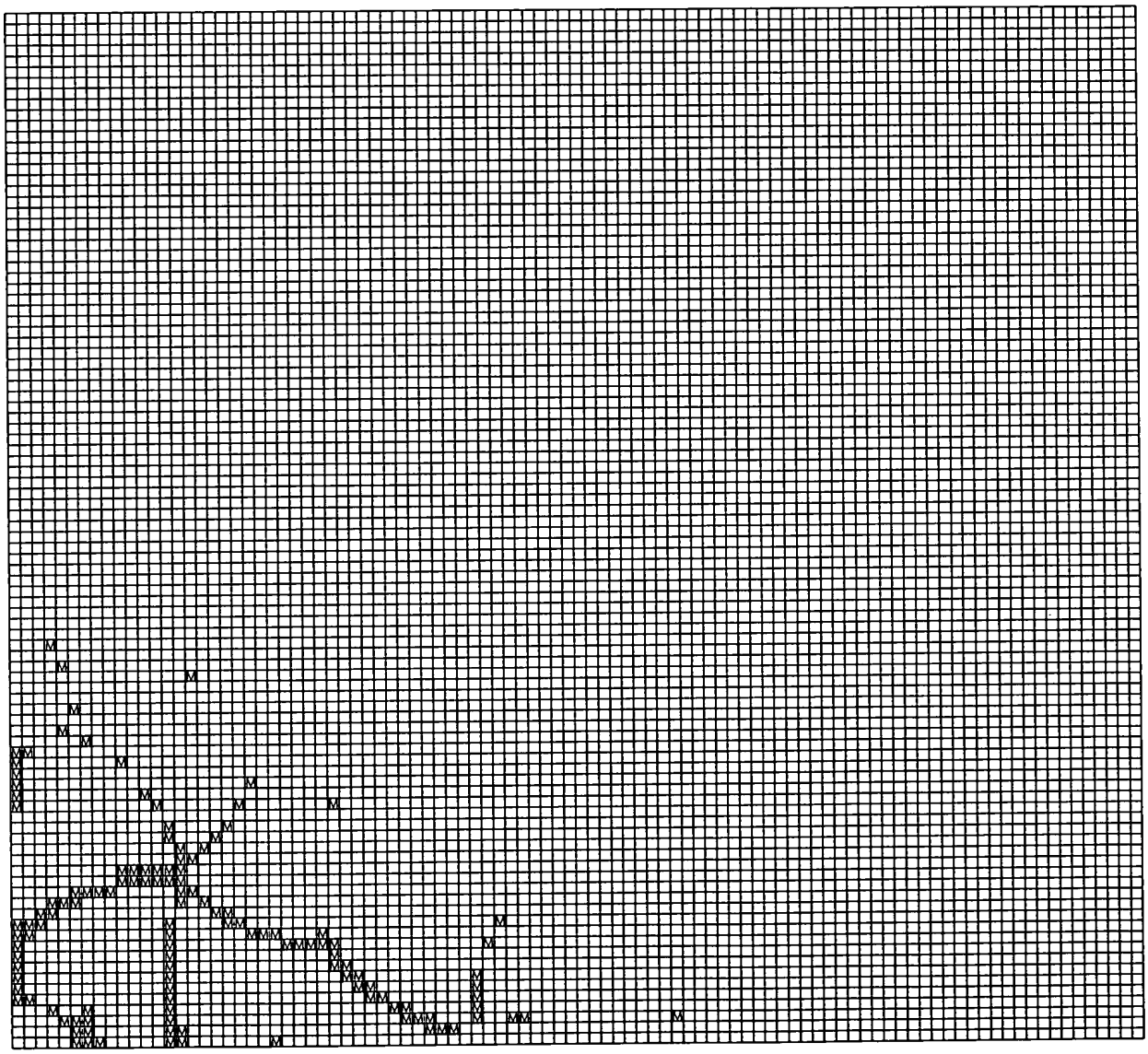


FIG. 14 YELLOW LAYER (Y)

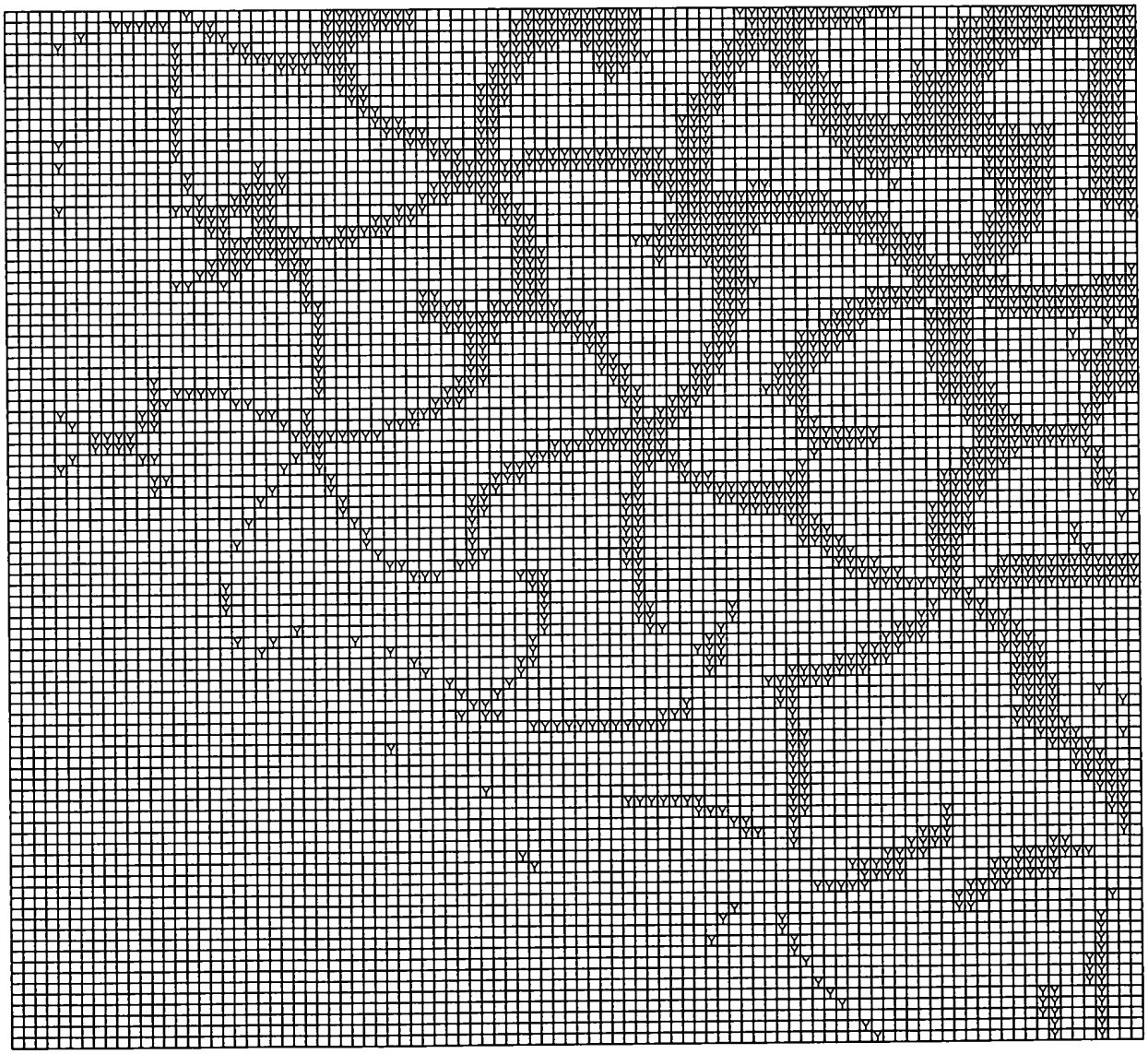


FIG. 15 RED LAYER (R)

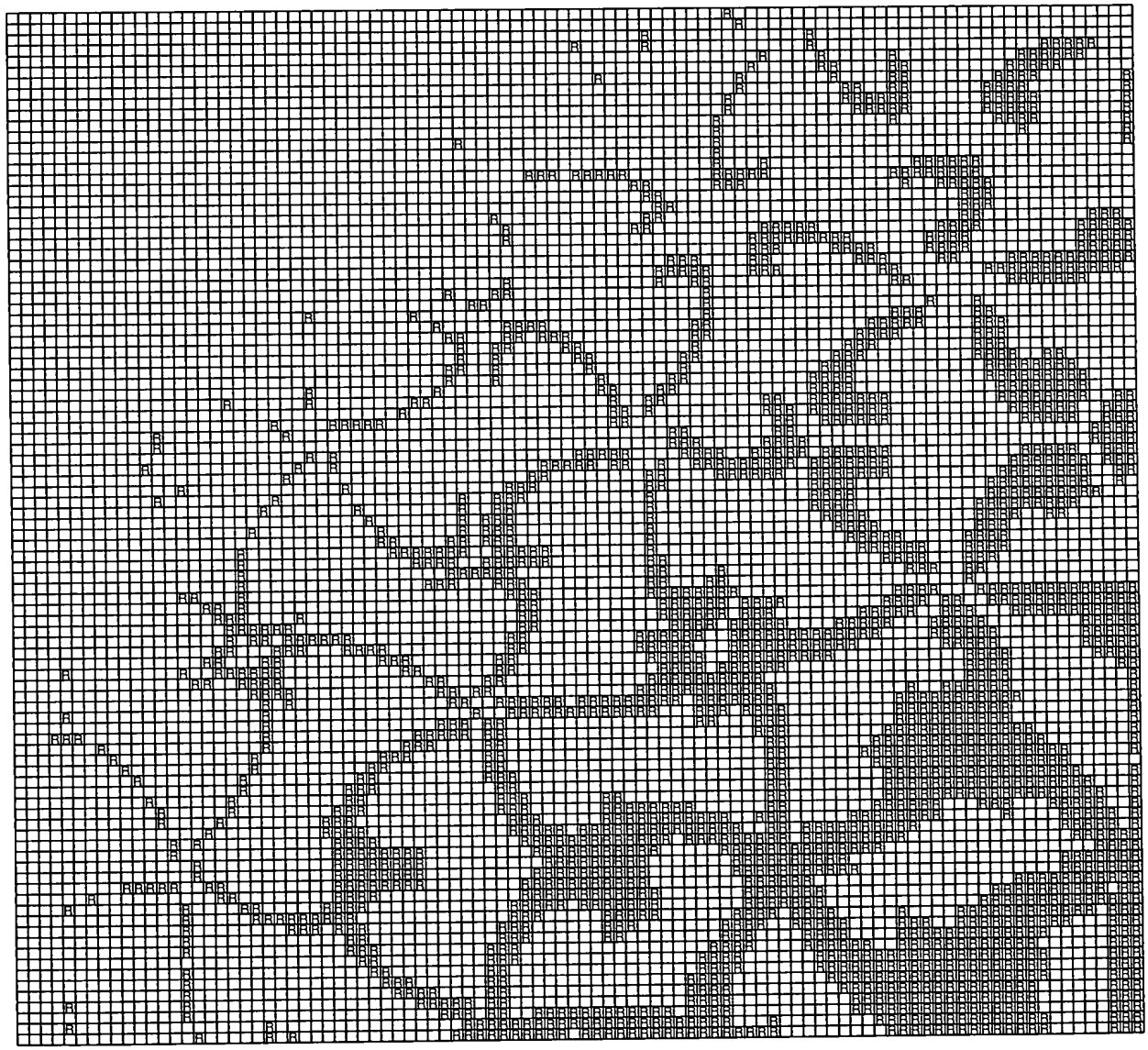


FIG. 16 GREEN LAYER (G)

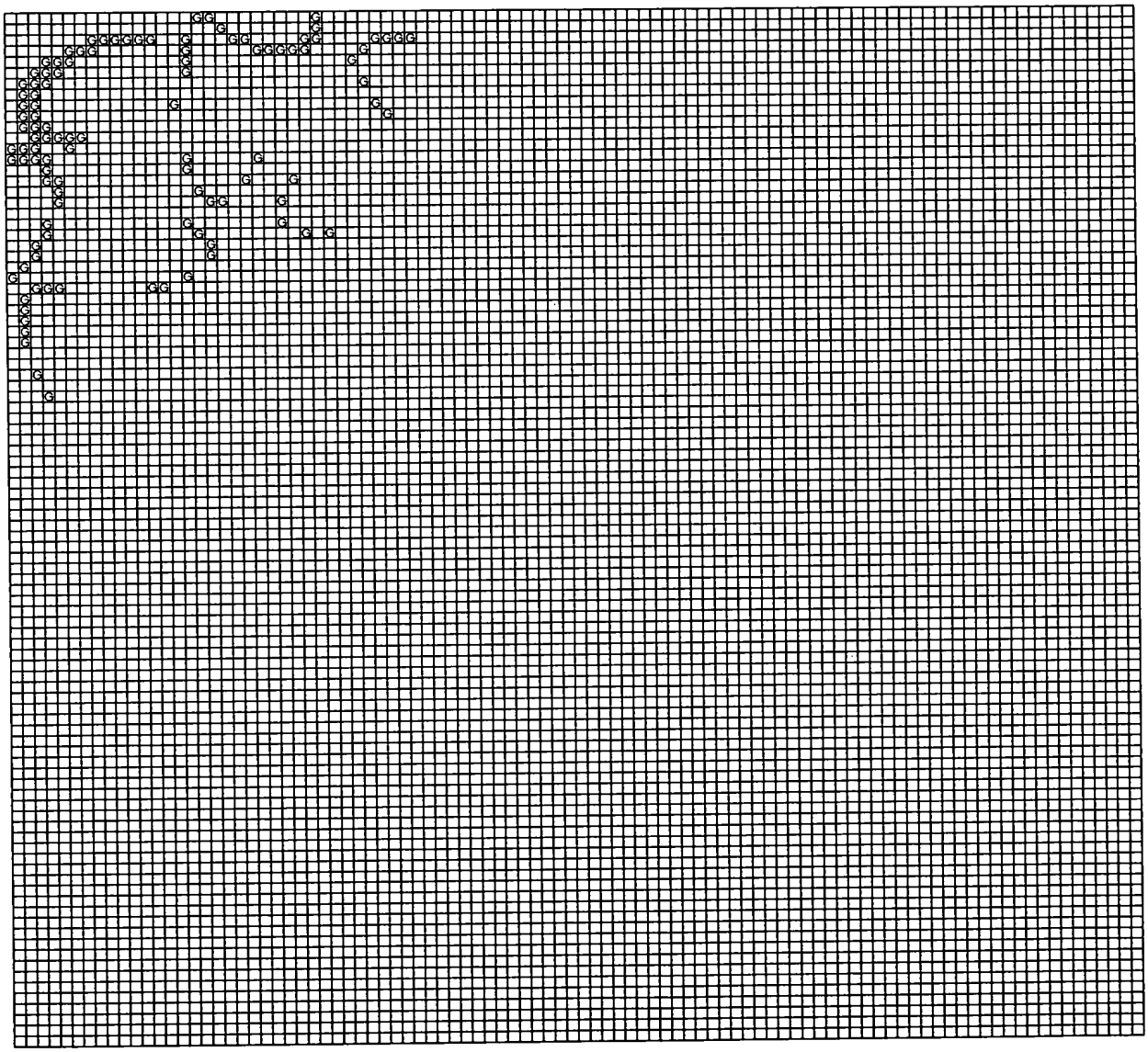


FIG. 17 BLACK LAYER (K)

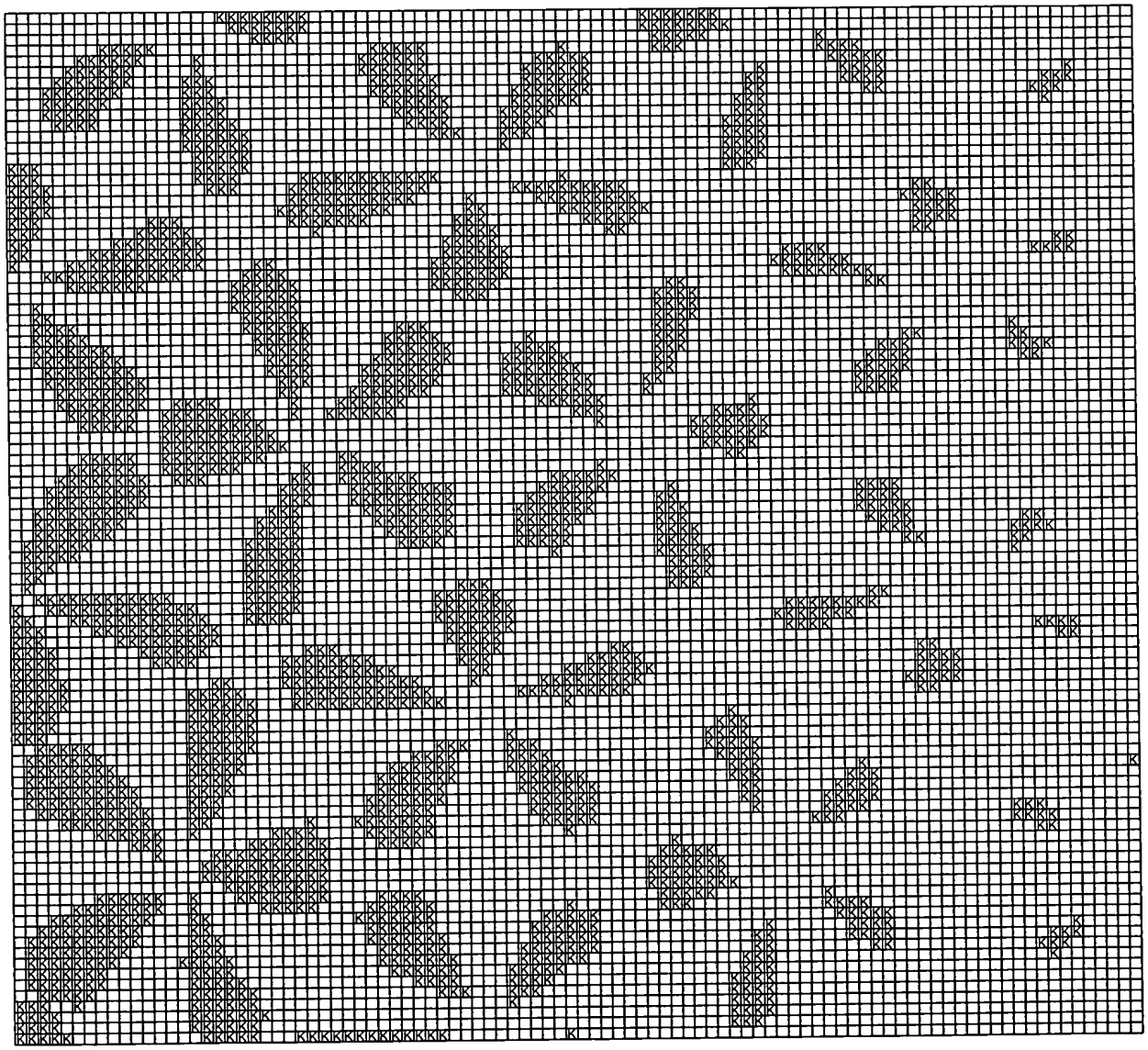


FIG. 18 WHITE LAYER (W)

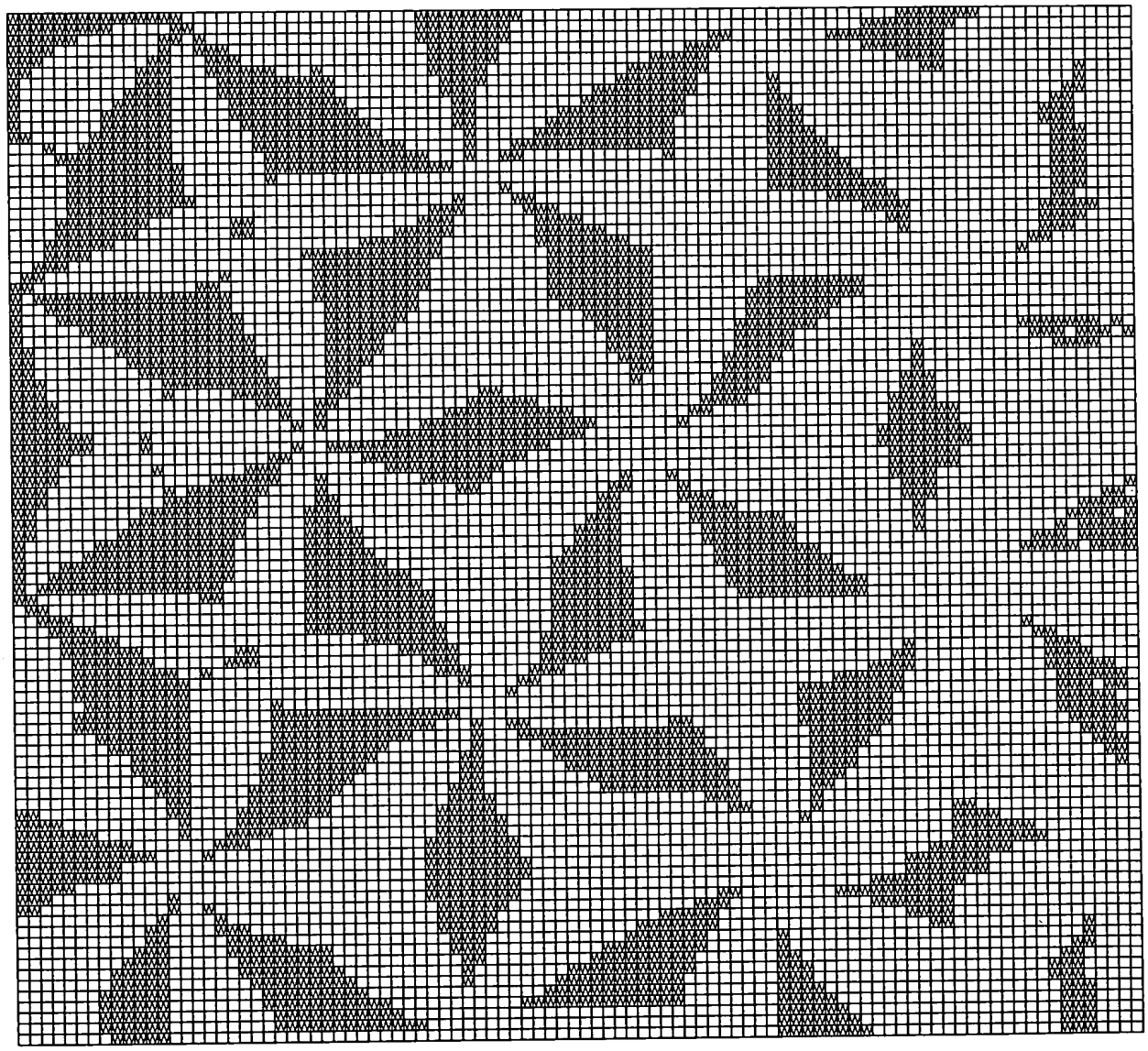


FIG. 19

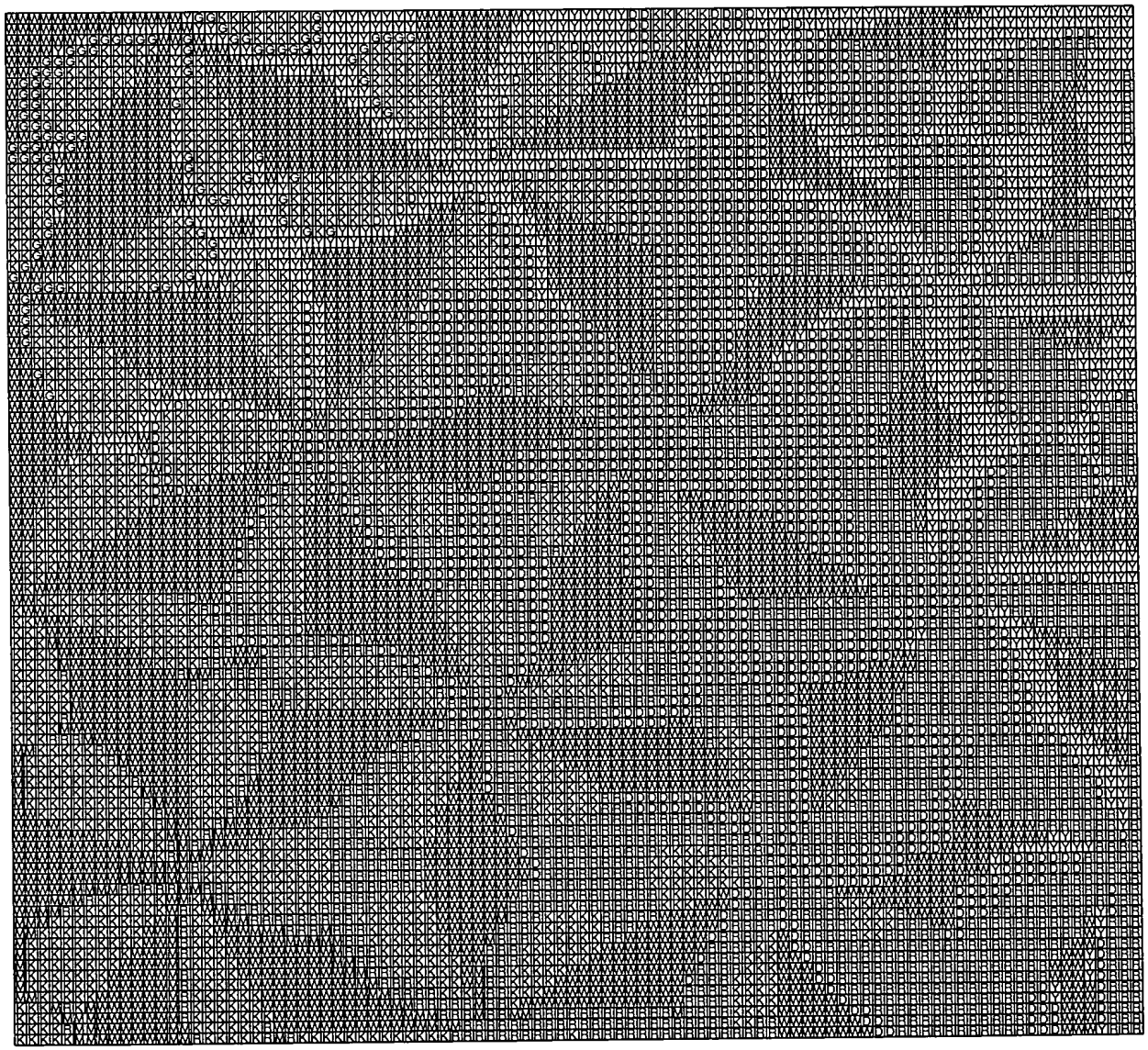


FIG. 20 BROWN-GOLD LAYER (D)

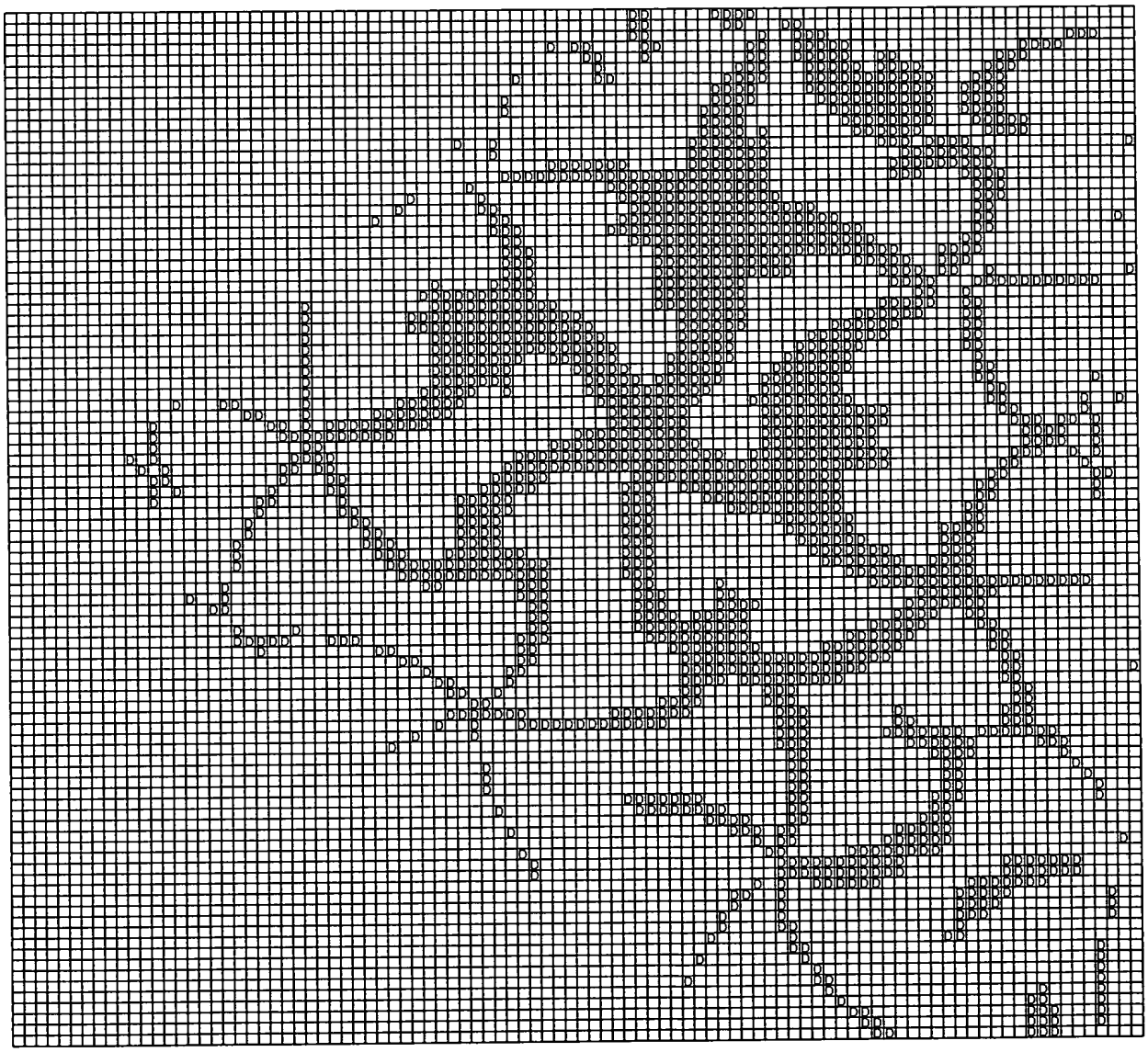


FIG. 21 MAGENTA LAYER (M)

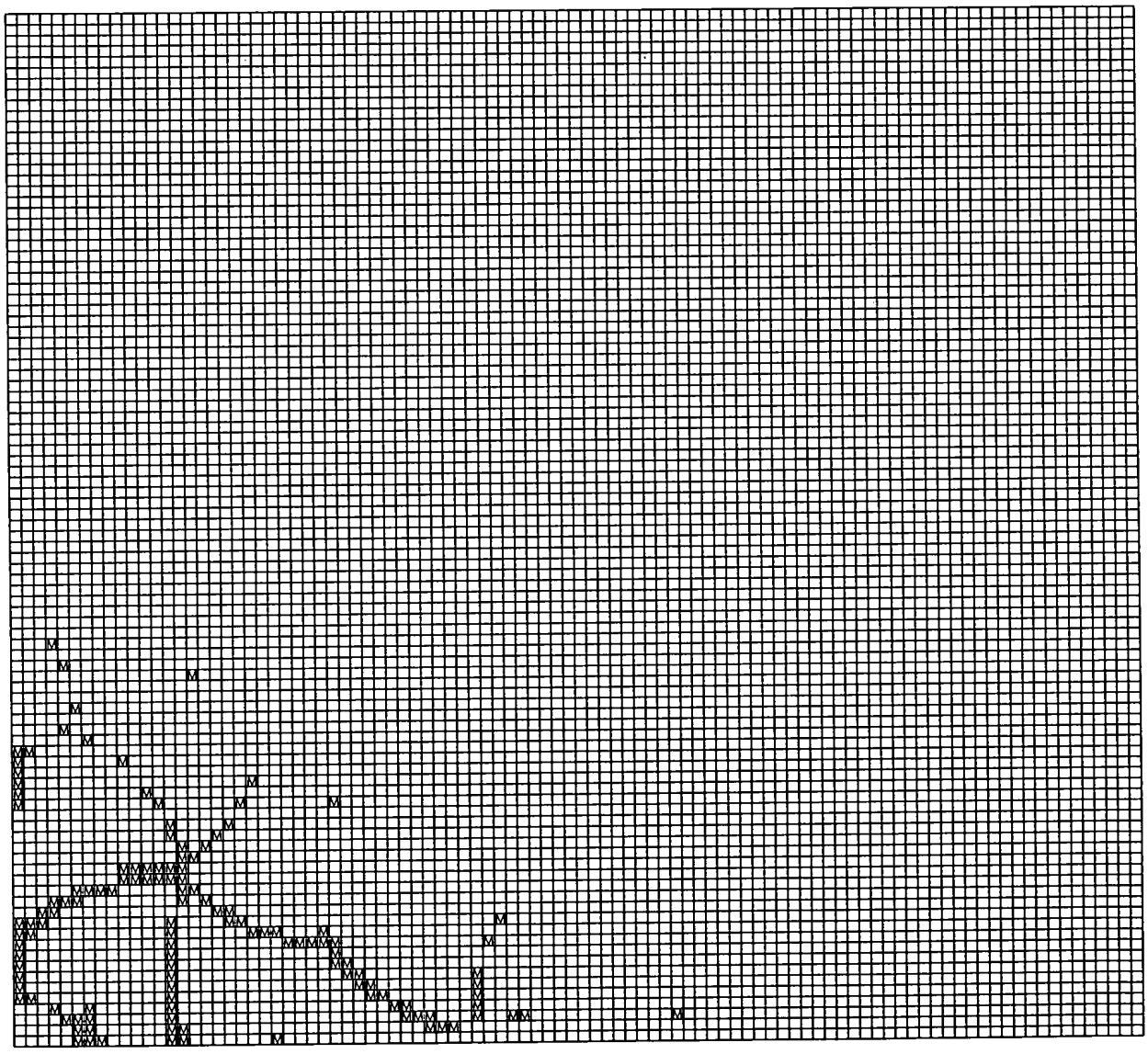


FIG. 22 YELLOW LAYER (Y)

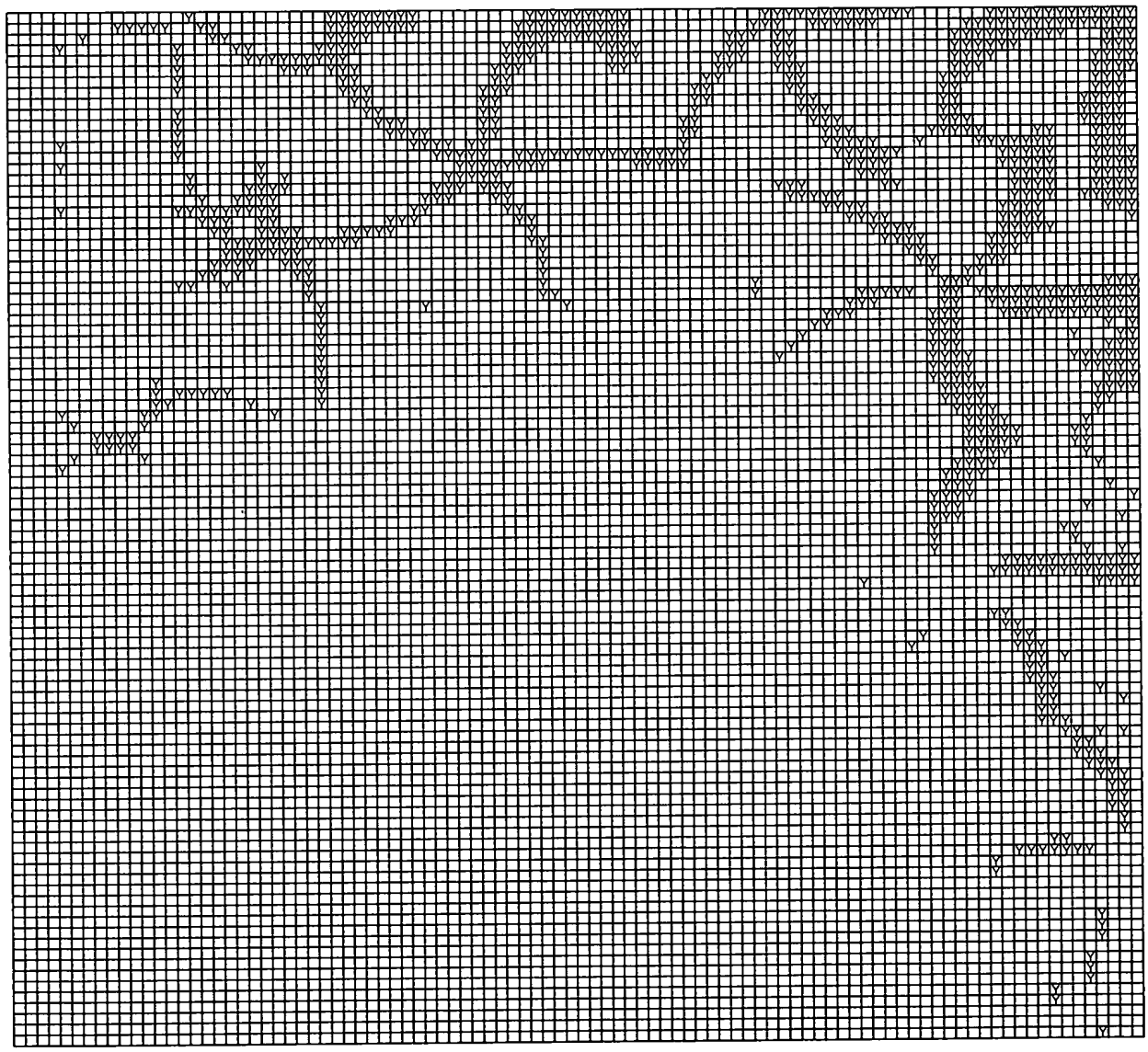


FIG. 23 RED LAYER (R)

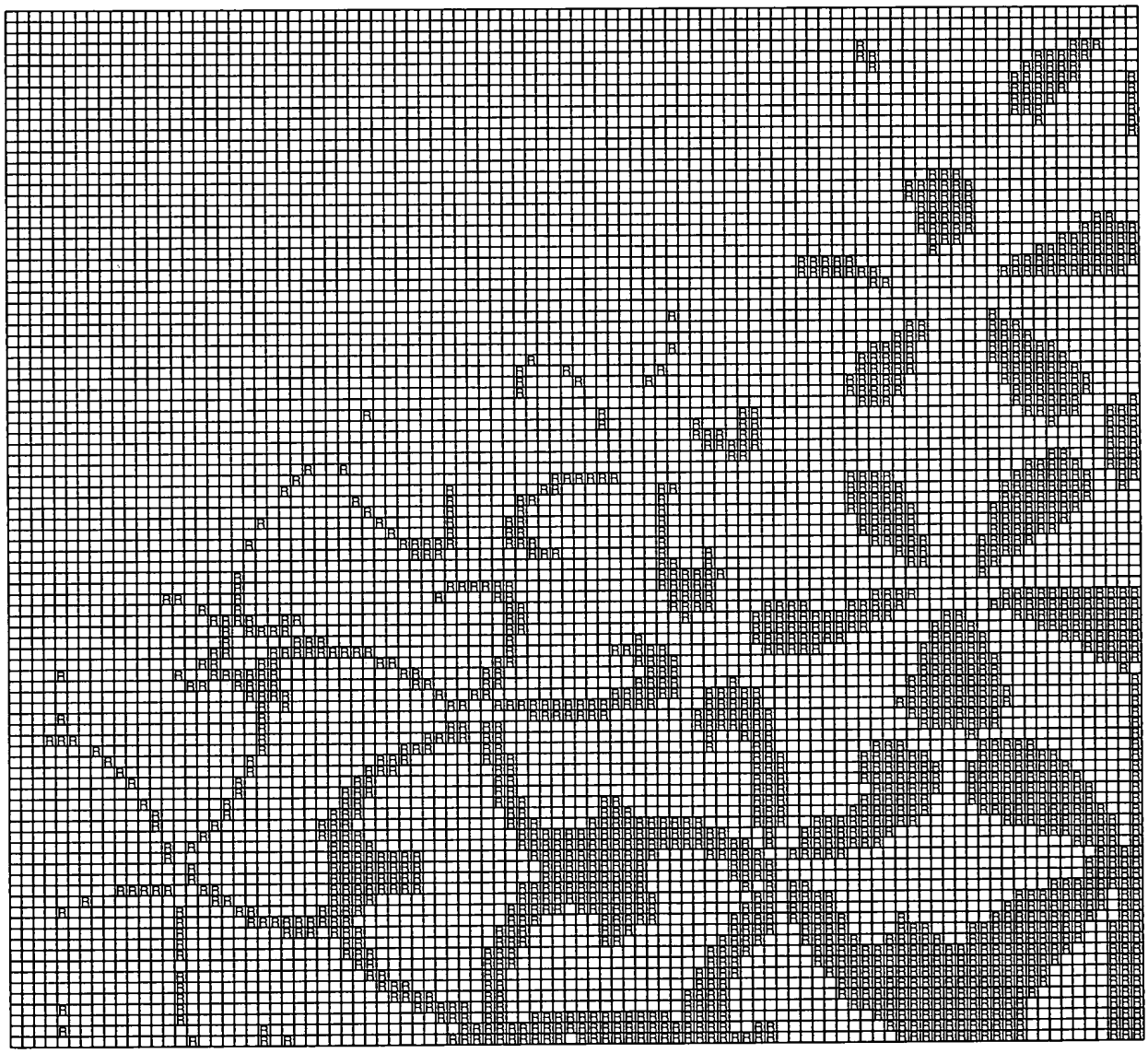


FIG. 24 GREEN LAYER (G)

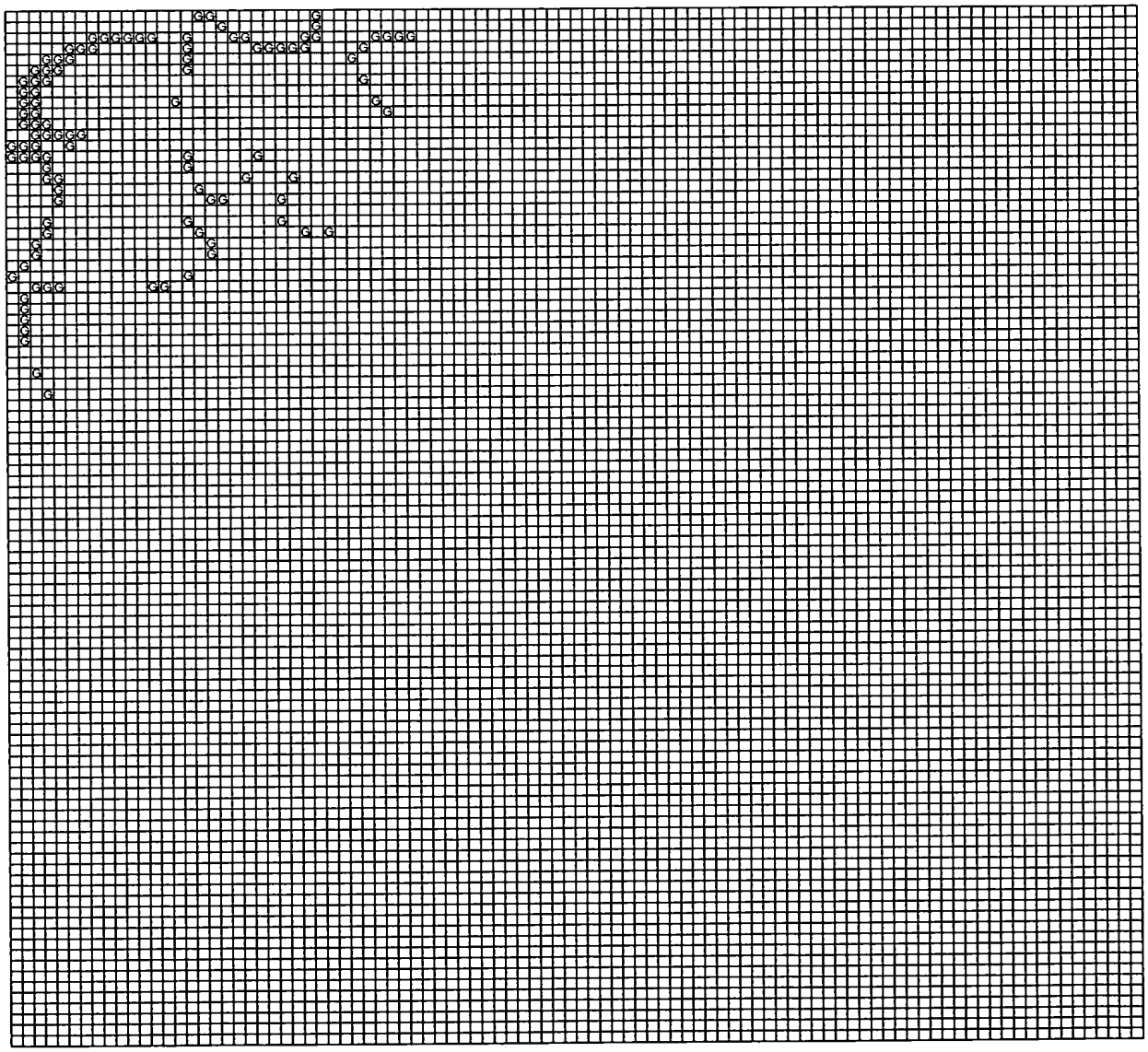


FIG. 25 BLACK LAYER (K)

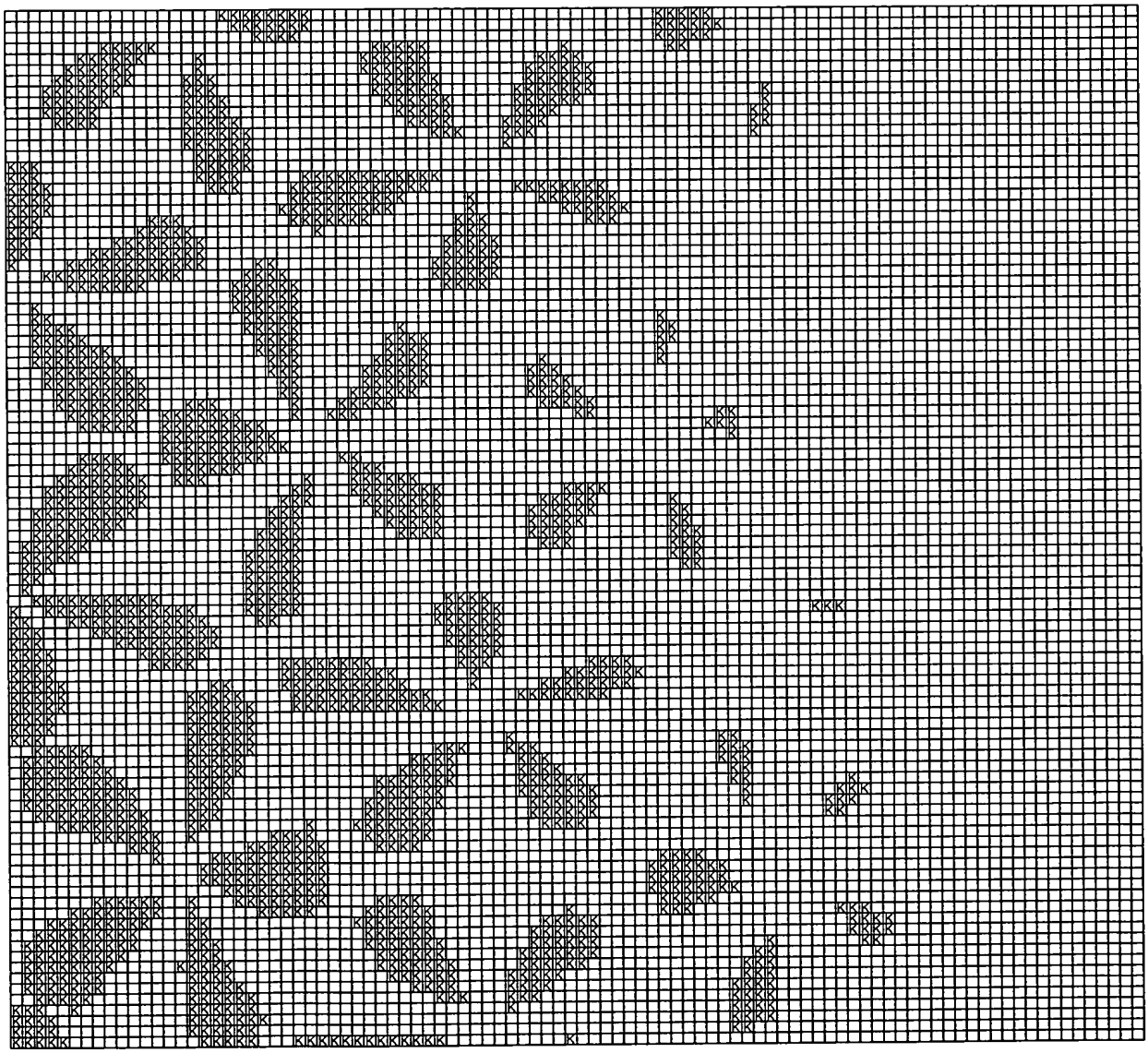
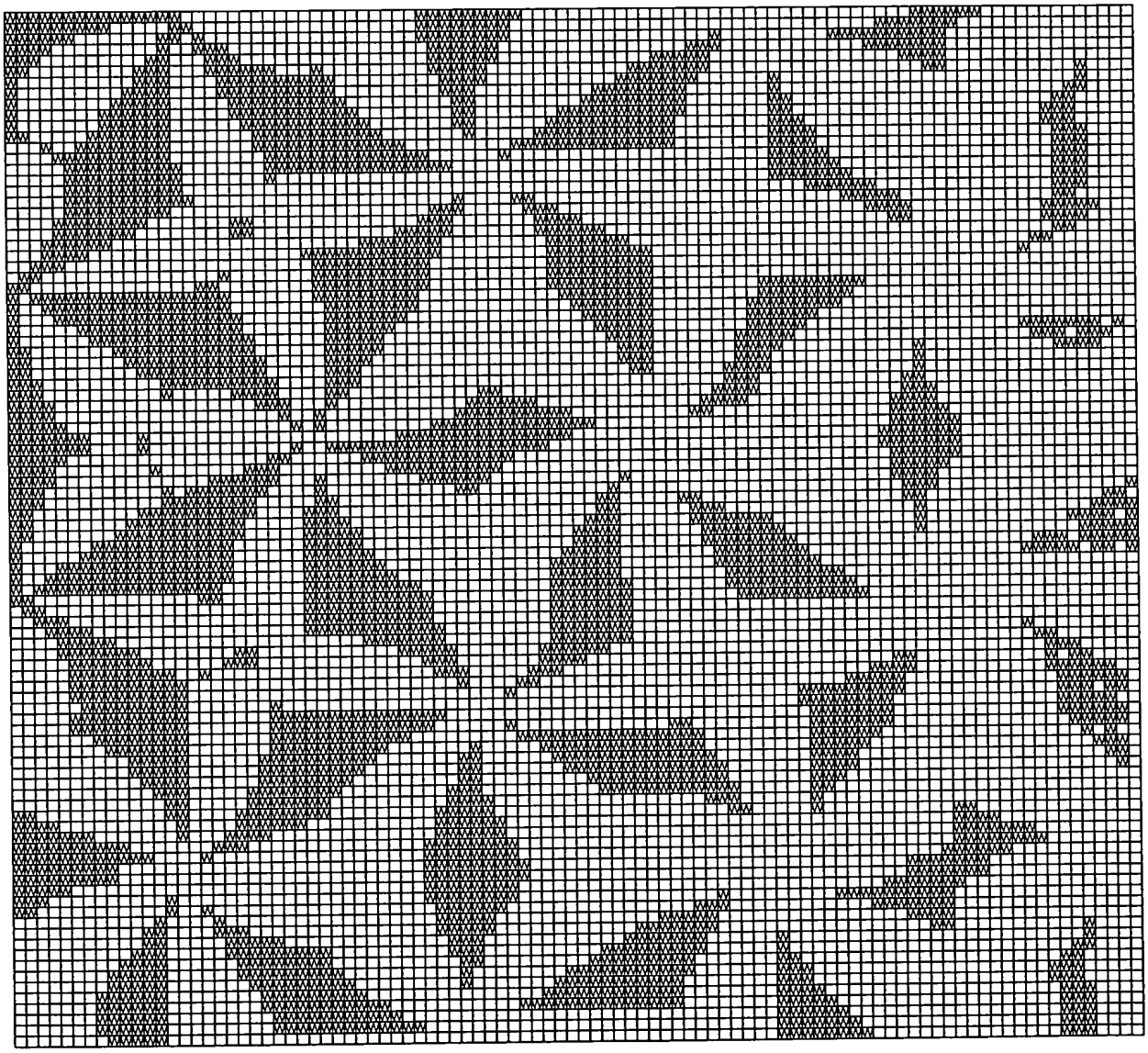


FIG. 26 WHITE LAYER (W)



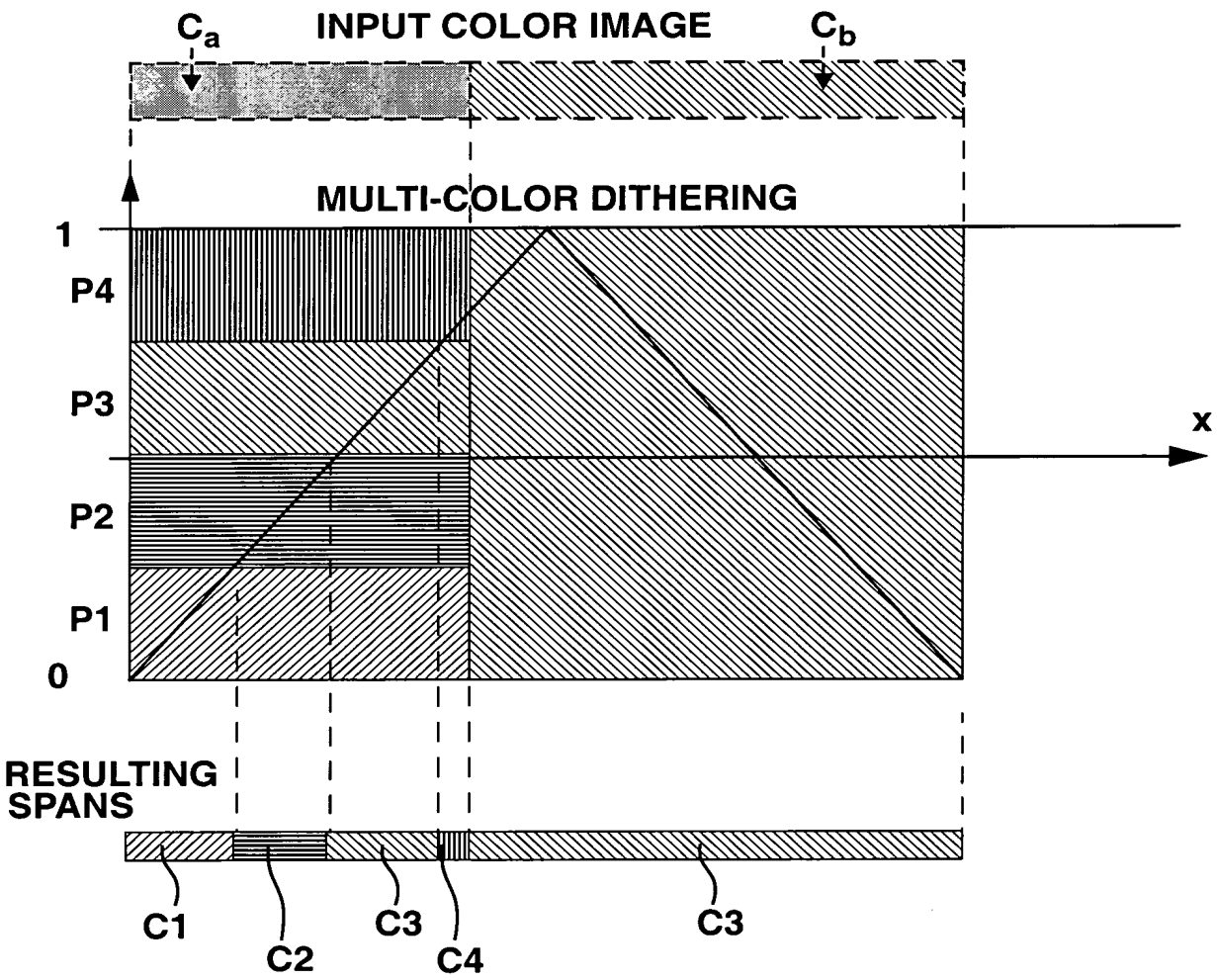

C_a
INPUT COLOR IMAGE
C_b
MULTI-COLOR DITHERING
1
P4
P3
P2
P1
0
x
RESULTING SPANS
C1
C2
C3
C4
C3

FIG. 27